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EXAMINER
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MILLS, DONALD L

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

### Office Action Summary

Application No.

09/673.423

**Applicant(s)**

DANIELSON ET AL.

Examiner

Donald L. Mills

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8,10-18,20,21,33,34 and 37-46 is/are pending in the application.  
4a) Of the above claim(s) 46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8,10-18,20,21,33,34 and 37-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/17/2000.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Newly submitted claim 45 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: allocation of time slots are determined based upon reviewing availability of free time slots.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 45 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Information Disclosure Statement***

2. The information disclosure statement filed 17 October 2000 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 10-14, 17, 18, 20, 21, 24-26, and 33-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clanton et al. (US 5,734,867), hereinafter referred to as Clanton, in view of Beyda et al. (US 6,058,111), hereinafter referred to as Beyda.

Regarding claims 1, 21, AND 42 respectively, Clanton discloses a method for instantaneous preemption of packet data, which comprises:

*Allocating a set of time slots to a circuit-switched first channel* (Referring to Figure 2, a set of time slots, 0 through 7, are allocated to the downlink channel;)

*Associating the allocated set of time slots to said first channel with a first level of priority* (Referring to Figure 5, the channel state of the time slot comprises a priority status for indicating a present priority level, comprising at least two levels. See column 4, lines 31-35;)

Clanton does not disclose *receiving a request for time slots for a circuit-switched second channel associated with a second level of priority; comparing said first and second levels of priority; and determining whether or not to deallocate time slots from said first channel, and allocate the deallocated time slots to said second channel, based upon said comparison.*

Clanton teaches allowing a higher priority subscriber unit to transmit based upon the central access manager's assigning the time slot to the higher priority subscriber unit over the channel (See column 4, lines 25-30.) Beyda teaches a circuit switched system wherein user devices are able to identify a particular communication as having a higher or lower level of priority. The lower priority level channels are identified as being "droppable." During communication on a particular channel, if another user device desires communication, which would require use of the already used channel, a network supervisor determines whether or not

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the previously used channel is identified as being droppable. If the currently used channel is identified as being droppable, the network supervisor is configured to cause the channel transmission to end and to allow the establishment of the subsequent channel (See Figure 1, column 2, lines 33-59.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the droppable switching circuit method/apparatus of Beyda in the system of Clanton. One of ordinary skill in the art at the time of the invention would have been motivated to do so in order to transmit high priority messages through channel reassignment with minimal overhead as taught by Clanton (See column 1, lines 34-36,) and Beyda (See column 1, lines 33-37.)

Regarding claims 2, 5, and 43 as explained in the rejection of claim 1, Clanton and Beyda teach all of the claim limitations of claim 1 (parent claim).

Clanton does not disclose *determining to deallocate time slots from said first channel if said second level of priority is higher than said first level of priority.*

Clanton teaches allowing a higher priority subscriber unit to transmit based upon the central access manager's assigning the time slot to the higher priority subscriber unit over the channel (See column 4, lines 25-30.) Beyda teaches a circuit switched system wherein user devices are able to identify a particular communication as having a higher or lower level of priority. The lower priority level channels are identified as being "droppable." During communication on a particular channel, if another user device desires communication, which would require use of the already used channel, a network supervisor determines whether or not the previously used channel is identified as being droppable. If the currently used channel is

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identified as being droppable, the network supervisor is configured to cause the channel transmission to end and to allow the establishment of the subsequent channel (See Figure 1, column 2, lines 33-59.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the droppable switching circuit method/apparatus of Beyda in the system of Clanton. One of ordinary skill in the art at the time of the invention would have been motivated to do so in order to transmit high priority messages through channel reassignment with minimal overhead as taught by Clanton (See column 1, lines 34-36,) and Beyda (See column 1, lines 33-37.)

Regarding claims 3 and 44 as explained in the rejection of claim 1, Clanton and Beyda teach all of the claim limitations of claim 1 (parent claim).

Clanton does not disclose *second level of priority is identified in said request*.

Clanton teaches allowing a higher priority subscriber unit to transmit based upon the central access manager's assigning the time slot to the higher priority subscriber unit over the channel (See column 4, lines 25-30.) Beyda teaches a circuit switched system wherein user devices are able to identify a particular communication as having a higher or lower level of priority. The lower priority level channels are identified as being "droppable." During communication on a particular channel, if another user device desires communication, which would require use of the already used channel, a network supervisor determines whether or not the previously used channel is identified as being droppable. If the currently used channel is identified as being droppable, the network supervisor is configured to cause the channel

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transmission to end and to allow the establishment of the subsequent channel (See Figure 1, column 2, lines 33-59.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the droppable switching circuit method/apparatus of Beyda in the system of Clanton. One of ordinary skill in the art at the time of the invention would have been motivated to do so in order to transmit high priority messages through channel reassignment with minimal overhead as taught by Clanton (See column 1, lines 34-36,) and Beyda (See column 1, lines 33-37.)

Regarding claims 4 and 45 as explained in the rejection of claim 1, Clanton and Beyda teach all of the claim limitations of claim 1 (parent claim).

Clanton does not disclose *deallocate time slots from said first channel is performed if there are insufficient non-allocated time slots available to satisfy said request.*

Clanton teaches allowing a higher priority subscriber unit to transmit based upon the central access manager's assigning the time slot to the higher priority subscriber unit over the channel (See column 4, lines 25-30.) Beyda teaches a circuit switched system wherein user devices are able to identify a particular communication as having a higher or lower level of priority. The lower priority level channels are identified as being "droppable." During communication on a particular channel, if another user device desires communication, which would require use of the already used channel, a network supervisor determines whether or not the previously used channel is identified as being droppable. If the currently used channel is identified as being droppable, the network supervisor is configured to cause the channel

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transmission to end and to allow the establishment of the subsequent channel (See Figure 1, column 2, lines 33-59.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the droppable switching circuit method/apparatus of Beyda in the system of Clanton. One of ordinary skill in the art at the time of the invention would have been motivated to do so in order to transmit high priority messages through channel reassignment with minimal overhead as taught by Clanton (See column 1, lines 34-36,) and Beyda (See column 1, lines 33-37.)

Regarding claim 10 as explained above in the rejection statement of claim 1, Clanton and Beyda disclose all of the claim limitations of claim 1 (parent claim).

Clanton does not disclose *associating the allocation of all time slots allocated to the first channel with the same level of priority.*

Clanton teaches assigning a channel state of the time slot including a priority status for indicating the present priority level for a time slot (See column 4, lines 31-34.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the same priority level in the time slots of Clanton. One of ordinary skill in the art would have been motivated to do so in order to protect high priority data from interruption.

Regarding claim 11 as explained above in the rejection statement of claim 1, Clanton and Beyda disclose all of the claim limitations of claim 1 (parent claim).

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Clanton does not disclose *associating the first channel with the first level of priority, resulting in associating the allocation of each time slot allocated to the first channel with the same level of priority.*

Clanton teaches assigning a channel state of the time slot including a priority status for indicating the present priority level for a time slot (See column 4, lines 31-34.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the same priority level in the time slots of Clanton. One of ordinary skill in the art would have been motivated to do so in order to protect high priority data from interruption.

Regarding claim 12, the primary reference further teaches *associating the allocation of different time slots allocated to the first channel with different levels of priority* (Referring to Figure 3, the channel state of the time slot comprises a priority status for indicating a present priority level for a time slot. See column 4, lines 33-34.)

Clanton does not disclose *deallocating from the first channel, and allocating to the second channel, only such time slots that have been allocated to the first channel with a level of priority that are lower than said second level of priority.*

Clanton teaches allowing a higher priority subscriber unit to transmit based upon the central access manager's assigning the time slot to the higher priority subscriber unit over the channel (See column 4, lines 25-30.) Beyda teaches a circuit switched system wherein user devices are able to identify a particular communication as having a higher or lower level of priority. The lower priority level channels are identified as being "droppable." During communication on a particular channel, if another user device desires communication, which

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would require use of the already used channel, a network supervisor determines whether or not the previously used channel is identified as being droppable. If the currently used channel is identified as being droppable, the network supervisor is configured to cause the channel transmission to end and to allow the establishment of the subsequent channel (See Figure 1, column 2, lines 33-59.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the droppable switching circuit method/apparatus of Beyda in the system of Clanton. One of ordinary skill in the art at the time of the invention would have been motivated to do so in order to transmit high priority messages through channel reassignment with minimal overhead as taught by Clanton (See column 1, lines 34-36,) and Beyda (See column 1, lines 33-37.)

Regarding claim 13 as explained above in the rejection statement of claim 1, Clanton and Beyda disclose all of the claim limitations of claim 1 (parent claim). Clanton does not disclose *associating the allocation of time slots allocated to the channel over a first portion of the network with one level of priority and associating the allocation of time slots allocated to the first channel over another portion of the network with another selected level of priority.*

Clanton teaches assigning a channel state of the time slot including a priority status for indicating the present priority level for a time slot (See column 4, lines 31-34.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the varying priority levels across different parts of the network in the time slots of Clanton. One of ordinary skill in the art would have been motivated to do so in

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order to protect high priority data transmission from interruption and allow low priority data transmission to be interrupted for high priority data transmission.

Regarding claim 14, the primary reference further teaches *changing the level of priority associated with the allocation of time slots to the channel as a consequence of changing bandwidth requirements* (Referring to Figure 3, the channel state of the time slot comprises a priority status for indicating a present priority level for a time slot, inherently changed to represent the present level of priority, comprising a packet channel type which identifies a busy-idle state. See column 4, lines 33-34.)

Regarding claim 17, the primary reference further teaches *selecting the levels of priority based upon the identity of a physical or virtual port or interface to/from which traffic pertaining to the respective channel is delivered* (Referring to Figure 3, the channel state of the time slot comprises a priority status for indicating a present priority level for a time slot, inherently based upon the air interface. See column 4, lines 33-34.)

Regarding claim 18, the primary reference further teaches *selecting the levels of priority based upon an identification of the type of application that traffic to be transported in the respective channel pertains to* (Referring to Figure 3, the channel state of the time slot comprises a priority status for indicating a present priority level for a time slot, utilized for establishing high priority for instantaneous transmission of short messages and short packets instantaneously. See column 4, lines 33-34.)

Regarding claim 20, the primary reference further teaches *transmitting information on the level of priority associated with the allocation time slots to a channel to one or more other nodes of the network in order for the other node or nodes to be able to switch the channel taking the*

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*level of priority into consideration* (Referring to Figure 3, subscriber unit A transmits on the corresponding uplink time slot, then the subscriber unit C with higher priority, transmits on the time slot. See column 3, lines 26-30.)

Regarding claim 24, Clanton discloses a method for instantaneous preemption of packet data, which comprises:

*Priority assignment means for associating the allocation of time slots to established circuit-switched channels with selected levels of priority* (Referring to Figure 5, the channel state of the time slot comprises a priority status for indicating a present priority level, comprising at least two levels, for timeslots in the uplink channel. See column 4, lines 31-35;)

Clanton does not disclose *slot allocating means provided to receive requests for time slots and to determine to deallocate time slots from the established channel, for allocation to the requests, based upon a comparison of levels of priority associated with the established channel and levels of priority associated with the requests*

Clanton teaches allowing a higher priority subscriber unit to transmit based upon the central access manager's assigning the time slot to the higher priority subscriber unit over the channel (See column 4, lines 25-30.) Beyda teaches a circuit switched system wherein user devices are able to identify a particular communication as having a higher or lower level of priority. The lower priority level channels are identified as being "droppable." During communication on a particular channel, if another user device desires communication, which would require use of the already used channel, a network supervisor determines whether or not the previously used channel is identified as being droppable. If the currently used channel is identified as being droppable, the network supervisor is configured to cause the channel

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transmission to end and to allow the establishment of the subsequent channel (See Figure 1, column 2, lines 33-59.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the droppable switching circuit method/apparatus of Beyda in the system of Clanton. One of ordinary skill in the art at the time of the invention would have been motivated to do so in order to transmit high priority messages through channel reassignment with minimal overhead as taught by Clanton (See column 1, lines 34-36,) and Beyda (See column 1, lines 33-37.)

Regarding claim 25, the primary reference further teaches *a slot utilization table indicating the level of priority associated with the allocation of time slots to established channels* (Referring to Figures 1 and 2, the central access manager 108 inherently tracts the priority of the time slots in order to determine when to permit a higher priority message or packet to be transmitted.)

Regarding claim 26, the primary reference further teaches *writing information designating that the time slot allocated to the channel is associated with the selected level of priority* (Referring to Figure 5, the channel state of the time slot, comprises a priority status for indicating a present priority level, is created. See column 4, lines 31-35.)

Regarding claims 33 and 35, the primary reference further teaches *specifying different traffic service classes based upon said priority levels when operating a communication network* (Referring to Figure 3, the channel state of the time slot comprises a priority status for indicating a present priority level for a time slot, utilized for establishing high priority for instantaneous transmission of short messages and short packets instantaneously. See column 4, lines 33-34.)

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Regarding claims 34 and 36, the primary reference further teaches *providing channel prioritization based upon said priority levels when interconnecting ports of a data switching or routing apparatus* (Referring to Figures 1 and 2, the channel state includes a channel type and the priority level of the time slot, for connecting ports of the central access manager. See column 2, lines 64-65.)

Regarding claims 37-39 as explained in the rejection of claim 1, Clanton and Beyda teach all of the claim limitations of claim 1 (parent claim).

Clanton does not teach *wherein said method is performed at a node of the network and wherein the request is received from another node of the network.*

Clanton teaches allowing a higher priority subscriber unit to transmit based upon the central access manager's assigning the time slot to the higher priority subscriber unit over the channel (See column 4, lines 25-30.) Beyda teaches a circuit switched system wherein user devices are able to identify a particular communication as having a higher or lower level of priority. The lower priority level channels are identified as being "droppable." During communication on a particular channel, if another user device desires communication, which would require use of the already used channel, a network supervisor determines whether or not the previously used channel is identified as being droppable. If the currently used channel is identified as being droppable, the network supervisor is configured to cause the channel transmission to end and to allow the establishment of the subsequent channel (See Figure 1, column 2, lines 33-59.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the droppable switching circuit method/apparatus of Beyda in the system of

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Clanton. One of ordinary skill in the art at the time of the invention would have been motivated to do so in order to transmit high priority messages through channel reassignment with minimal overhead as taught by Clanton (See column 1, lines 34-36,) and Beyda (See column 1, lines 33-37.)

Regarding claim 41 as explained in the rejection statement of claim 1, Clanton and Beyda disclose all of the claim limitations of claim 1 (parent claim).

Clanton does not disclose *defining the level of priority for the allocation of time slots to one or more of said channels so that a higher level of priority is assigned for allocation of time slots to channels carrying traffic pertaining to real-time applications, such as voice or video applications, whereas a lower level of priority is assigned for allocation of time slots to channels carrying bursty data traffic.*

Clanton teaches allowing users to transmit on the uplink channel based upon ownership of the timeslot based upon a higher priority (See column 3, lines 13-16.) Clanton teaches allowing a higher priority subscriber unit to transmit based upon the central access manager's assigning the time slot to the higher priority subscriber unit over the channel (See column 4, lines 25-30.) Beyda teaches a circuit switched system wherein user devices are able to identify a particular communication as having a higher or lower level of priority. The lower priority level channels are identified as being "droppable." During communication on a particular channel, if another user device desires communication, which would require use of the already used channel, a network supervisor determines whether or not the previously used channel is identified as being droppable. If the currently used channel is identified as being droppable, the

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network supervisor is configured to cause the channel transmission to end and to allow the establishment of the subsequent channel (See Figure 1, column 2, lines 33-59.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement higher priority to voice traffic over data traffic in the system of Clanton. One of ordinary skill in the art at the time of the invention would have been motivated to do so in order to prioritize delay sensitive traffic such as voice traffic ahead of data traffic, which is not as sensitive to delay.

5. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clanton et al. (US 5,734,867), hereinafter referred to as Clanton, in view of Beyda et al. (US 6,058,111), hereinafter referred to as Beyda, further in view of Chan (US 5,790,551).

Regarding claim 6 as explained above in the rejection statement of claim 1, Clanton and Beyda disclose all of the claim limitations of claim 1 (parent claim).

Clanton does not disclose *determining whether to deallocate the time slots from the first channel based upon an evaluation regarding to which channel a time slot was last allocated.*

Chan teaches sending a request for assignment of a channel for transmission of data, comprising a particular frequency/time slot, and the network responds with the identification of a particular channel, after reviewing all time slots including those that may have been previously allocated, that may be used for a particular time period to transmit data (See column 1, lines 61-66.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method for preemption of Clanton in the system of Chan. One of

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ordinary skill in the art would have been motivated to do so in order to send short messages and high priority short packets instantaneously without going through a contention process (See column 1, lines 35-38.)

Regarding claim 7 as explained above in the rejection statement of claim 1, Clanton and Beyda disclose all of the claim limitations of claim 1 (parent claim). Clanton does not disclose *deallocating time slots from the first channel based upon an evaluation regarding to which channel a time slot has been allocated the longest period of time.*

Chan teaches sending a request for assignment of a channel for transmission of data, comprising a particular frequency/time slot, and the network responds with the identification of a particular channel, after reviewing all time slots including those that may have been previously allocated for extended periods of time, that may be used for a particular time period to transmit data (See column 1, lines 61-66.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method for preemption of Clanton in the system of Chan. One of ordinary skill in the art would have been motivated to do so in order to send short messages and high priority short packets instantaneously without going through a contention process (See column 1, lines 35-38.)

Regarding claim 8 as explained above in the rejection statement of claim 1, Clanton and Beyda disclose all of the claim limitations of claim 1 (parent claim).

Clanton does not disclose *deallocating the time slots from the first channel based upon an evaluation regarding from which channel a time slot was last deallocated.*

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Chan teaches sending a request for assignment of a channel for transmission of data, comprising a particular frequency/time slot, and the network responds with the identification of a particular channel, after reviewing all time slots including those that may have been previously deallocated, that may be used for a particular time period to transmit data (See column 1, lines 61-66.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method for preemption of Clanton in the system of Chan. One of ordinary skill in the art would have been motivated to do so in order to send short messages and high priority short packets instantaneously without going through a contention process (See column 1, lines 35-38.)

6. Claims 15, 16, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clanton et al. (US 5,734,867), hereinafter referred to as Clanton, in view of Beyda, in further view of Kusano et al. (US 5,933,422), hereinafter referred to as Kusano.

Regarding claims 15 and 40 as explained above in the rejection statement of claim 1, Clanton and Beyda disclose all of the claim limitations of claim 1 (parent claim).

Clanton does not disclose *determining the priority by which the channels are to be re-established in case of channel failure based upon their respective levels of priority.*

Kusano teaches a communication network recoverable from link failure using prioritized recovery classes comprising a path management table 80 where virtual paths comprises a fault recovery class with three levels of priority indicating which paths are to be recovered (See column 3, lines 24-28.)

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the prioritized fault recovery method of Kusano in the system of Clanton. One of ordinary skill in the art would have been motivated to do so in order to guarantee necessary bandwidth for continued operation in the event of a failure during the transmission of a message or packet in system comprising multiple uplink and downlink channels.

Regarding claim 16 as explained above in the rejection statement of claim 1, Clanton and Beyda disclose all of the claim limitations of claim 1 (parent claim).

Clanton does not disclose *determining a degree of redundancy requested for the channels based upon their respective levels of priority*.

Kusano teaches a communication network recoverable from link failure using prioritized recovery classes comprising a path management table 80 where virtual paths comprises a fault recovery class with three levels of priority indicating which paths are to be recovered (See column 3, lines 24-28.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the prioritized fault recovery method of Kusano in the system of Clanton. One of ordinary skill in the art would have been motivated to do so in order to guarantee necessary bandwidth for continued operation in the event of a failure during the transmission of a message or packet.

### ***Response to Arguments***

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7. Applicant's arguments filed 03 May 2006 have been fully considered but they are not persuasive.

#### Rejection Under 35 USC 103

On page 9 of the remarks, regarding claims 1 and 21, in response to applicant's arguments, the recitation that a bitstream propagating in the network is divided into frames, the recurrent frame of those frames is divided into time slots; and the circuit switched channels are allocated respective sets of time slots of those times slots has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

On page 10 of the remarks, regarding claims 1 and 21, the Applicant argues the "channel" of the present application should be compared with the one time slot "channel" of Clanton. The Examiner respectfully disagrees. The Examiner interprets *allocating a set of time slots to a circuit-switched first channel* as the entire set of time slots allocated to the downlink channel and an entire second set of time slots allocated to the uplink channel, not as subsets as inferred by the Applicant. Accordingly, Clanton discloses a set of time slots, 0 through 7, which are allocated to the downlink channel. The Examiner respectfully reminds the Applicant that the claims are given their broadest, reasonable interpretation.

On page 10 of the remarks, regarding claims 1 and 21, the Applicant argues the invention is flexible in that typically only a subset of the set of time slots allocated to the first channel are reallocated to the second channel and expressed in claim 1 as “determining whether or not to deallocate time slots from said first channel.” The Examiner respectfully disagrees. The claims do not explicitly reflect dividing a channel into a subset of time slots for deallocation, since all of the time slots of each channel can be grouped into a single set. The Examiner respectfully reminds the Applicant that the claims are given their broadest, reasonable interpretation. Should the claims be amended to reflect such a “subset” limitations, one could overcome the rejection of the prior art. However, the claims in their current form do not explicitly reflect the interpretation as set forth by the Applicant, therefore, the Examiner’s interpretation and rejection are upheld.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L. Mills whose telephone number is 571-272-3094. The examiner can normally be reached on 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Donald L Mills



July 18, 2006



RICKY Q. NGO  
SUPERVISORY PATENT EXAMINER